

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/535,545
Source: IFWP
Date Processed by STIC: 6/14/06

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IFWP

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DATE: 06/14/2006

PATENT APPLICATION: US/10/535,545

TIME: 10:32:40

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\06142006\J535545.raw

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3 <110> APPLICANT: SOCIETE DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENTIFIQUES
4   (S.C.R.A.S.)
6 <120> TITLE OF INVENTION: Process for preparing recombinant heterocarpine
8 <130> FILE REFERENCE: RS 331 PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/535,545
C--> 10 <141> CURRENT FILING DATE: 2005-05-18
10 <150> PRIOR APPLICATION NUMBER: FR 02/15563
11 <151> PRIOR FILING DATE: 2002-12-10
13 <160> NUMBER OF SEQ ID NOS: 14
15 <170> SOFTWARE: PatentIn version 3.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 10
19 <212> TYPE: PRT
20 <213> ORGANISM: Pilocarpus Heterophyllus (peptide fragment)
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30 <212> TYPE: PRT
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40 <211> LENGTH: 6
41 <212> TYPE: PRT
42 <213> ORGANISM: Pilocarpus Heterophyllus (peptide fragment)
44 <400> SEQUENCE: 3
46 Pro Glu Ser Glu Ser Tyr
47 1           5
50 <210> SEQ ID NO: 4
51 <211> LENGTH: 41
52 <212> TYPE: DNA
53 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: Primer for 5' specific cDNA products
58 <400> SEQUENCE: 4
59 tccaagcagc aaaaactagt gacccagggg ccattatatc t
62 <210> SEQ ID NO: 5
63 <211> LENGTH: 38
64 <212> TYPE: DNA
65 <213> ORGANISM: Artificial Sequence

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67 <220> FEATURE:

68 <223> OTHER INFORMATION: Primer for 3' specific cDNA products

70 <400> SEQUENCE: 5

71 cggatatggac gcggtatttg ctgatggtgt tgatgtaa

38

74 <210> SEQ ID NO: 6

75 <211> LENGTH: 1675

76 <212> TYPE: DNA

77 <213> ORGANISM: Pilocarpus Heterophyllus (5' cDNA fragment of the cDNA encoding for

W--> 78 heterocarpine)

80 <400> SEQUENCE: 6

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83 aagctaattc ttatcttttt tctttctttt tgttgttgtt ttgtcaaagc agcaatgagg 120
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87 ctccatgcta actcaagttc ggatgagaga tcaacatata tagttcatat ggacaagacc 240
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91 aagtctacaa agccaaccaa attaaatcgc cgtcgatcct caccacttct tgtatactct 360
93 tacgacaatg ctgctcatgg ttccagtgcg gttttatctc aacaggaact tgaaactcta 420
95 aaaaagtctc cagggttctg ctccagttat gccgataaga cagcgacact tgacaccacc 480
97 cagcagctg aatttctctc cctgaatact gccaacgggt tgtggcctgc ttcaaagtat 540
99 ggtgaagata taattgttgg tgttattgac agcgggtgtc gcccgagag tgaaagttat 600
101 aatgatgatg gtatgggcgc tattccaagc agatggaagg gagaatgtga agctggacaa 660
103 gagttcaatt cctccatgtg caactcaaag cttattggag ctatatattt cgataaggg 720
105 atcattgagg caaatcctgg gattaacatt agcatgaaat ctgccagaga tactatgggg 780
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131 tacgccagca atgatgtgaa acctaaggca agcatcaagt tccaacaaac tgttctgggc 1560
133 acaaagcctg caccagccgt ggctttctat acttctagag gtccgctacc gagctatcca 1620
135 ggcatcttaa agccagatat aatggccctt gggtcactag tttttgctgc ttgga 1675

138 <210> SEQ ID NO: 7

139 <211> LENGTH: 1689

140 <212> TYPE: DNA

141 <213> ORGANISM: Pilocarpus Heterophyllus (3' cDNA fragment of the cDNA encoding for

W--> 142 heterocarpine)

144 <400> SEQUENCE: 7

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147 tgagaccccg ttgtatgaag atcctatagc aattgcctca ttctgtgcta cagagaaggg 120
149 cgtagtggtc tcatcttcag caggaaatgc agggccagcg ctaggagct tgcacaatgg 180
151 aatcccatgg acgttaactg ttgcagctgg aaccattgac cgttcatttg caggcactat 240
153 aactcttggg agtggggaaa ccatcattgg atggacaatg ttcccagcca gtgcttatgt 300

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157 atctcaactc cgaactgacg ccactcatcg atgcgaagaa gctgaagatt cggtatctga 420
159 gcaaatactc gttgtcagtg catcgaacat tcggggagcc atatttgttt cagattatga 480
161 tgctgaatta tttgaacttg gtggtgtgac tattcctggg gtcgtgatta gcaccaagga 540
163 tgcaccggct gtgatcagct acgccagcaa tgatgtgaaa cctaaggcaa gcatcaagtt 600
165 ccaacaaact gttctgggca caaagcctgc accagccgtg gctttctata cttctagagg 660
167 tccgtcaccg agctatccag gcatctttaa gccagatata atggcccttg ggtcactagt 720
169 ttttgctgct tggattccaa atctgtctac agcccaaatt gggttgaata cctcttgac 780
171 aagtgaatac aatatggttt ctggaacatc aatggcctgc cctcatgctg ctggtgtagc 840
173 tgctctcctt aagggcgac accctgaatg gagtgcagct gctattaggt ctgcaatgat 900
175 gactacagca aatcccttgg ataacacact aaatccaatc cgggacaatg gtctaataca 960
177 tttcacatct gcttcacctt tagctatggg agccggccaa gttgatccta atcgggcact 1020
179 tgatcctggg ttgatttatg aaaccacccc acaagattat gtgagcctcc tctgactct 1080
181 gaacttcacc caaaacaaaa tctgttccat tacaagatca aaccgttaca gctgctccac 1140
183 ccctaatact gatcttaact atccttcttt tattacttta cactacaaca caaatgcaac 1200
185 atttgttcag acttttcaca ggactgtgac taacgttggg ggaagcgcta caacttaca 1260
187 ggccaagatc actgctctc taggttctgt agttagtgtc tcaccagaca cattggcctt 1320
189 cagaaagcag tatgagcagc agagctacga gctcactatt gagtacaagc ctgatggtga 1380
191 agaaactggt tcatttgggg aacttctgtg gattgaagaa aatgggaatc acactgtgag 1440
193 gagccctatt acagtgtcac ctccatgag taactttgtg tttatgggta cacaataatt 1500
195 gataaaaaatt tgttctgac acaactgtgg gaataatcga cgtttatgaa cccagaataa 1560
197 gttgtttggg cgtcttcaac attatcataa aggacttgaa tcatgtgtgt tgattttctg 1620
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205 <211> LENGTH: 2630
206 <212> TYPE: DNA
207 <213> ORGANISM: Pilocarpus Heterophyllus (cDNA encoding for heterocarpine)
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214 tctaggaatg gtgttcttca tttattcctt ttcgttcttg catggcttct gttggcggt 180
216 ctccatgcta actcaagttc ggatgagaga tcaacatata tagttcatat ggacaagacc 240
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220 aagtctacaa agccaaccaa attaaatcgc cgtcgatcct caccacttct tgtatactct 360
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224 aaaaagtcct caggtttcgt ctccagttat gccgataaga cagcgacact tgacaccacc 480
226 catacacctg aatttctctc cctgaatact gccaacgggt tgtggcctgc ttcaaagtat 540
228 ggtgaagata taattgttgg tgttattgac agcgggtgtc ggccggagag tgaaagtat 600
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234 atcattgcgg caaatcctgg gattaacatt agcatgaaat ctgccagaga tactatgggg 780
236 catgggactc acacatctc cacagttgct gggaattatg tggatggcgt ttcattcttt 840
238 ggctatgcta aaggtagcgc aaaaggagtg gcaccacggg cgagagtggc tatgtacaag 900
240 gtcatttttg acgaagggcg ctatgcatct gatgttcttg ccggtatgga cgcggctatt 960
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246 gcaggaaatg cagggccagc gctagggagc ttgcacaatg gaatcccatg gacgttaact 1140
248 gttgcagctg gaaccattga ccgttcattt gcaggcacta taactcttgg gagtggggaa 1200

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252 tataacaaga cttactctgc atgcaactca actcgattat tatctcaact ccgaactgac 1320
254 gccatcatcg tatgcgaaga agctgaagat tcggtatctg agcaaatatc tgttgtcagt 1380
256 gcatcgaaca ttcggggagc catatttggt tcagattatg atgctgaatt atttgaactt 1440
258 ggtggtgtga ctattcctgg tgtcgtgatt agcaccaagg atgcaccggc tgtgatcagc 1500
260 tacgccagca atgatgtgaa acctaaggca agcatcaagt tccaacaaac tgttctgggc 1560
262 aaaaagctg caccagccgt ggctttctat acttctagag gtccgtcagc gactatcca 1620
264 ggcattctaa agccagatat aatggccctt gggtcactag tttttgctgc ttggattcca 1680
266 aatactgcta cagcccaaat tggtttgaat accctcttga caagtgaata caatatgggt 1740
268 tctggaacat caatggcctg ccctcatgct gctggtgtag ctgctctcct taaggcgca 1800
270 caccctgaat ggagtgcagc tgctattagg tctgcaatga tgactacagc aaatcccttg 1860
272 gataacacac taaatccaat ccgggacaat ggtctaatac atttcacatc tgcttcacct 1920
274 ttagctatgg gagccggcca agttgatcct aatcggggcac ttgatcctgg tttgatttat 1980
276 gaaaccaccc cacaagatta tgtgagcctc ctctgcaact tgaacttcac ccaaaaccaa 2040
278 atcctgtcca ttacaagatc aaaccgttac agctgtccca cccctaatac tgatcttaac 2100
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282 aggactgtga ctaacgttgg aggaagcgct acaacttaca aggccaagat cactgctcct 2220
284 ctaggttctg tagttagtgt ctcaccagac acattggcct tcagaaagca gtatgagcag 2280
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292 cacaactgtg ggaataatcg acgtttatga acccagaata agttgtttgg tcgtcttcaa 2520
294 cattatcata aaggacttga atcatgtgtg ttgattttct gcaaaaaaaaa aaaaaaaaaa 2580
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299 <210> SEQ ID NO: 9

300 <211> LENGTH: 2325

301 <212> TYPE: DNA

302 <213> ORGANISM: Pilocarpus Heterophyllus (encoding part of cDNA encoding for

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305 <400> SEQUENCE: 9

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310 aagaccata tgcccaaaac cttctctagc cccaccattt ggtactcttc ggtcgttcga 180
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314 tactcttacg acaatgctgc tcatggtttc agtgcagttt tatctcaaca ggaacttgaa 300
316 actctaaaaa agtctccagg tttcgtctca gtttatgccg ataagacagc gacacttgac 360
318 accaccata cacctgaatt tctctccctg aatactgcca acgggttggt gcctgcttca 420
320 aagtatggtg aagatataat tgttggtgtt attgacagcg gtgtctggcc ggagagttaa 480
322 agttataatg atgatggtat gggcgctatt ccaagcagat ggaagggaga atgtgaagct 540
324 ggacaagagt tcaattcctc catgtgcaac tcaaagctta ttggagctag atatttcgat 600
326 aagggtatca ttgcggcaaa tcctgggatt aacattagca tgaaatctgc cagagatact 660
328 atggggcatg ggactcacac atcctccaca gttgctggga attatgtgga tggcgtttca 720
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336 tatgaagatc ctatagcaat tgcctcattc gctgctacag agaaggggcg agtggctcca 960
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340 ttaactgttg cagctggaac cattgaccgt tcatattgcag gcactataac tcttgggagt 1080
342 ggggaaacca tcattggatg gacaatgttc ccagccagtg cttatgtagc agacttgcca 1140

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366 tcacctttag ctatgggagc cggccaagtt gatcctaate gggcacttga tcctgggttg 1860
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370 aaccaaattcc tgtccattac aagatcaaac cgttacagct gctccacccc taatcctgat 1980
372 cttactatc cttcttttat tactttacac tacaacacaa atgcaacatt tgttcagact 2040
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376 gctcctctag gttctgtagt tagtgtctca ccagacacat tggccttcag aaagcagtat 2160
378 gagcagcaga gctacgagct cactattgag tacaagcctg atggtgaaga aactgtttca 2220
380 tttggggaac ttgtttgat tgaagaaaat ggaatcaca ctgtgaggag ccctattaca 2280
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385 <210> SEQ ID NO: 10

386 <211> LENGTH: 774

387 <212> TYPE: PRT

388 <213> ORGANISM: *Pilocarpus heterophyllus* (heterocarpaceae)

390 <400> SEQUENCE: 10

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397 20 25 30
400 Ser Thr Tyr Ile Val His Met Asp Lys Thr His Met Pro Lys Thr Phe
401 35 40 45
404 Ser Ser Pro His His Trp Tyr Ser Ser Val Val Arg Ser Leu Lys Ser
405 50 55 60
408 Thr Lys Pro Thr Lys Leu Asn Arg Arg Arg Ser Ser Pro Leu Leu Val
409 65 70 75 80
412 Tyr Ser Tyr Asp Asn Ala Ala His Gly Phe Ser Ala Val Leu Ser Gln
413 85 90 95
416 Gln Glu Leu Glu Thr Leu Lys Lys Ser Pro Gly Phe Val Ser Val Tyr
417 100 105 110
420 Ala Asp Lys Thr Ala Thr Leu Asp Thr Thr His Thr Pro Glu Phe Leu
421 115 120 125
424 Ser Leu Asn Thr Ala Asn Gly Leu Trp Pro Ala Ser Lys Tyr Gly Glu
425 130 135 140
428 Asp Ile Ile Val Gly Val Ile Asp Ser Gly Val Trp Pro Glu Ser Glu
429 145 150 155 160
432 Ser Tyr Asn Asp Asp Gly Met Gly Ala Ile Pro Ser Arg Trp Lys Gly
433 165 170 175
436 Glu Cys Glu Ala Gly Gln Glu Phe Asn Ser Ser Met Cys Asn Ser Lys
437 180 185 190

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VERIFICATION SUMMARY

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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:78 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:

L:142 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:

L:303 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: